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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,679	11/08/2002	Shyh-yeu Wang	8696-US-PA	9293

31561 7590 08/03/2004

JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE
 7 FLOOR-1, NO. 100
 ROOSEVELT ROAD, SECTION 2
 TAIPEI, 100
 TAIWAN

EXAMINER

CASTRO, ANGEL A

ART UNIT PAPER NUMBER

2653

DATE MAILED: 08/03/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/065,679

Applicant(s)

WANG ET AL.

Examiner

Angel A Castro

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 10-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to Amendment A filed 5/24/04.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-9 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Yashiro et al (U.S. Pat. 5,238,722).

Regarding claim 1, Yashiro et al discloses a structure for intensifying tracking signals from an optical disk (figure 2), at least comprising:

a substrate 1;

a dye material layer 2 over the substrate;

an optical correction layer 5 over the dye material layer; and

a reflection layer 3 over the optical correction layer,

wherein the optical correction layer between the dye material layer and the reflection layer is a layer for improving tracking signals from the optical disk (column 3, lines 59-60).

Regarding claim 3, Yashiro et al discloses that the optical correction layer is a transparent or a semi-transparent layer (column 3, lines 67-68).

Regarding claim 4, Yashiro et al discloses that the material constituting the transparent or semi-transparent layer is selected from a group of inorganic compound consisting of metal, silicon and oxygen, nitrogen, sulfur (column 3, lines 67-68).

Regarding claim 5, Yashiro et al discloses that the optical correction layer is formed in a sputtering process (column 4, lines 22-26).

Regarding claim 6, Yashiro et al shows that the maximum absorption of light by the dye occurs at a wavelength between 500 ~ 650 nm (see figure 3).

Regarding claims 7-8, Yashiro et al discloses that the optical correction layer has a thickness between 10 Å to 1000 Å or 30 Å to 300Å (column 4, lines 3-6).

Regarding claim 9, Yashiro et al discloses that the material constituting the reflection layer is selected from a group consisting of gold, silver, aluminum and an alloy thereof (column 3, lines 50-54).

Regarding claim 16, it is inherent from the claim that the optical correction layer increases the first order diffraction since Yashiro discloses that the track error signals are increased (see table 1) and the track error signals are obtained from the first order diffraction of the diffracted beam.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yashiro et al in view of Miyamoto et al (U.S. Pat. 6,636,477).

Regarding claim 2, Yashiro et al discloses the optical disk described above. Yashiro et al does not specifically disclose that the optical disk is a recordable digital versatile disk (DVD-R). Miyamoto et al discloses a recordable digital versatile disk (DVD-R) (figure 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the optical disk of Yashiro et al in a digital versatile disk as taught by Miyamoto et al.

The rationale is as follows: One of ordinary skill in the art would have been motivated to utilize the optical disk of Yashiro et al in a digital versatile disk as taught by Miyamoto et al as doing this would increase the capacity of the disk while ensuring a reliable reproduction performance.

Response to Arguments

5. Applicant's arguments filed 5/24/04 have been fully considered but they are not persuasive. mm.

Applicant asserts in page 6, last three lines and page 7, first 4 lines:

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“The present invention particularly introduces the optical correction layer 23 formed on the dye material layer 22. First, **the dye material, as known by the skilled artisan, is the organic**. In other words, the present invention is directed to the organic dye material for recording. Then, for the organic dye layer, in order to improve the recording quality, the optical correction layer 23 is used. As shown in Table 1, **the optical correction layer 23 can improve the tracking signal, or more specifically at least significantly improve the 1st order diffraction value to improve the tracking signal**, as recited in newly added claim 16.”

The examiner respectfully points out that the quality of the dye (organic or inorganic) is not claimed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kay (U.S. Pat. 5,406,541) discloses an apparatus for a dual half-aperture focus sensor system; Kadowaki et al (U.S. Pat. 5,293,367) discloses an optical pickup head.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angel A Castro whose telephone number is 703-308-8435. The examiner can normally be reached on Monday through Thursday, 8 AM to 6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R Korzuch can be reached on 703-305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Angel Castro, Ph.D.